

A Correlational Analysis of Pre-service Teachers' Lifelong Learning Tendency and Teaching Motivation

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Abstract

This study aims to explore the relation between lifelong learning tendency and teaching motivation among pre-service teachers. In this study, a correlational survey model was used to investigate the relation between pre-service teachers' lifelong learning tendency and their teaching motivation. The study also examined whether lifelong learning tendency and teaching motivation differed in terms of perception of being a successful teacher in the future and wishing to be a teacher after graduation. The participants of this research were 452 pre-service teachers studying at the Education Faculty of a state university in Turkey in the spring term of 2020-2021. The research data were collected with personal information form and with "Lifelong Learning Tendency Scale" and "Motivation to Teach Scale". The results obtained from the research showed that pre-service teachers' thinking that they will be successful teachers in the future affects their lifelong learning tendencies and teaching motivations positively. As pre-service teachers' desire to teach after graduation increased, their motivation to teach increased. There is a positive low level significant relation between pre-service teachers' lifelong learning tendencies and their teaching motivation. Teaching motivation of pre-service teachers has a positive low effect on their lifelong learning tendencies. It is necessary for pre-service teachers to have a high motivation to teach and thus have a high lifelong learning tendency, to keep up with the times, to improve themselves, to update their knowledge, and to change.

Keywords: Lifelong learning, teaching motivation, pre-service teacher, curiosity, perseverance.

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Öğretmen Adaylarının Hayat Boyu Öğrenme Eğilimleri ile Öğretme Motivasyonlarının İlişkisel Analizi

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Öz

Bu çalışma, öğretmen adaylarının yaşam boyu öğrenme eğilimi ile öğretme motivasyonu arasındaki ilişkiyi araştırmayı amaçlamaktadır. Bu çalışmada öğretmen adaylarının yaşam boyu öğrenme eğilimleri ile öğretme motivasyonları arasındaki ilişkiyi araştırmak amacıyla ilişkisel tarama modeli kullanılmıştır. Araştırmada ayrıca gelecekte başarılı bir öğretmen olma algısı ve mezun olduktan sonra öğretmen olmayı isteme durumu açısından yaşam boyu öğrenme eğilimi ve öğretme motivasyonunun farklılaşp farklılaşmadığı da incelenmiştir. Bu araştırmanın katılımcılarını 2020-2021 bahar döneminde Türkiye'deki bir devlet üniversitesinin Eğitim Fakültesi'nde öğrenim gören 452 öğretmen adayı oluşturmaktadır. Araştırma verileri kişisel bilgi formu ile "Hayat Boyu Öğrenme Eğilimleri Ölçeği" ve "Öğretme Motivasyonu Ölçeği" ile toplanmıştır. Araştırmadan elde edilen sonuçlar, öğretmen adaylarının gelecekte başarılı öğretmen olacaklarını düşünmelerinin yaşam boyu öğrenme eğilimlerini ve öğretme motivasyonlarını olumlu yönde etkilediğini göstermiştir. Öğretmen adaylarının mezuniyet sonrası öğretmenlik yapma istekleri arttıkça öğretme motivasyonları da artmıştır. Öğretmen adaylarının yaşam boyu öğrenme eğilimleri ile öğretme motivasyonları arasında pozitif yönde düşük düzeyde anlamlı bir ilişki vardır. Öğretmen adaylarının öğretme motivasyonları, onların yaşam boyu öğrenme eğilimleri üzerinde olumlu yönde düşük bir etkiye sahiptir. Öğretmen adaylarının öğretme motivasyonlarının yüksek olması ve dolayısıyla yaşam boyu öğrenme eğilimlerinin yüksek olması için, çağa ayak uydurabilmeleri, kendilerini geliştirebilmeleri, bilgilerini güncelleyebilmeleri ve değişebilmeleri gerekmektedir.

Anahtar Sözcükler: Yaşam boyu öğrenme, öğretme motivasyonu, öğretmen adayı, merak, sebat.

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Introduction

Most children starting primary school today will start working in the future in entirely new types of jobs that do not yet exist (European Commission, 2018). It seems inevitable that universities, which are vocational education institutions, will become inadequate day by day to produce the workforce of the future. Every knowledge learned today becomes obsolete and outdated tomorrow. The only way to contribute to the qualified manpower of the future is to raise individuals who learn how to learn and have a high tendency for lifelong learning. Lifelong learning is an umbrella concept that is not bound to any place, time, or age limit, including all kinds of learning such as formal, informal, distance and out-of-school. Lifelong learning (LL) is a continuous, voluntary and self-motivated learning process for individual or professional purposes (Cliath et al., 2000). LL is defined as all activities aimed at improving the knowledge, skills, and competencies of an individual throughout his/her life, individually, socially or professionally (European Commission, 2018). Pre-service teachers with a high tendency towards lifelong learning has an inquisitive mind motivated to learn (Candy et al., 1994). It is inevitable for teachers to be lifelong learners for a sustainable professional development process (Acar & Uçuş, 2017). There are many affective and professional characteristics associated with pre-service teachers' lifelong learning tendencies. The self-perception level of success and willingness to engage in the lessons of pre-service teachers are related to their lifelong learning tendencies (Kula, 2022). A low and positive correlation between pre-service teachers' lifelong learning tendencies and achievement motivation (Yılmaz & Kaygin, 2018); a moderate and positive correlation between LL and learning-oriented motivation and teacher self-efficacy perceptions (Ay, Uslu, & Arık, 2021); a positive correlation between LL and teaching attitude (Ünal & Akay, 2017); a positive correlation between LL and student-centred teaching belief and change tendencies (Şentürk & Baş, 2021); a positive correlation between LL and social emotional learning (Akcaalan, 2016); a positive correlation between LL and social entrepreneurship characteristics (Sezen-Gultekin, & Gur-Erdogan, 2016); and a positive correlation between LL and emotional intelligence levels (Bozdemir et al., 2020) has been determined. In Zhou and Tu (2021)'s research, it was determined that organizational learning culture, managerial effectiveness, learning content focus, collaborative learning, and psychological empowerment are factors that increase teachers' lifelong learning.

Lifelong learning for adults is often associated with a professional career, increasing one's knowledge and skills in the field of work (Andronie, 2012). Therefore, it is thought that the lifelong learning tendency level of a pre-service teacher may affect future teaching characteristics (Thwe, & Kálmán, 2023). At the same time, it is known that teachers' professional competencies are predictive of lifelong learning tendencies (Şen & Yıldız Durak, 2022). As the key concept of a quality education system, teachers' professional attitudes, energy and motivation along with their teaching skills are critical in creating the quality of learning. These teaching skills includes many factors that interact with each other such as the teacher's teaching motivation, communication skills, professionalism, discipline and sensitivity. This research focuses on pre-service teachers' lifelong learning tendencies and teaching motivations.

Teaching Motivation

Motivation stimulates and activates the organism, enabling the individual to direct the behavior towards a specific goal. A teacher's teaching motivation is one of the main sources for being an effective instructor. Because a motive or a chain of motives underlies every human behavior (Cüceloğlu, 2010). Motivation is defined as any process involving initiating, directing and maintaining physical and psychological activities (Gerrig et al., 2015). According to self-determination theory (Deci & Ryan, 2000), which focuses on the processes behind personality development and the organization of behaviors, motivation is; a complex concept that depends on various internal and external factors that push the individual to behavior and determine the quality and continuity of these behaviors. Intrinsic motivation creates behaviors that the individual enjoys and finds interesting, originating from the effects like interest, curiosity and need coming from within the individual (Ryan & Deci, 2000). Extrinsic motivation, on the other hand, can be defined as the source of behaviors that occur in order to avoid punishment or to obtain a reward (Ryan & Deci, 2000). The level of teachers' performance directly connects to their motivation (Leithwood, 2006). However, it is known that teachers show lower levels of motivation and higher levels of stress compared to other occupational groups (Neves de Jesus, &

Lens, 2005). In addition, some research results in China and Turkey showed that external factors play a determining role in teachers' professional motivation (Kilinc, Watt, & Richardson, 2012; Lin et al. 2012). This can be explained by the fact that teachers in developing countries are more extrinsically motivated and the possible determining role of socioeconomic determinants in teachers' internal motivation (Bukhari, et al. 2023). These and similar research results show the need for research on determining variables related to teaching motivation.

The possibility of pre-service teachers to perform effective practices at school, be a good teacher and work with devotion while raising future generations depends on their teaching motivation. There are studies showing that there are positive and significant correlations between the motivations of individuals and their performance (Amri, & Ramdani, 2021). This leads to the conclusion that teachers' teaching motivation will directly affect their professional performance (Haryaka, & Sjamsir, 2021). It is thought that determining which variables affect pre-service teachers' lifelong learning tendencies and teaching motivations and the relation between variables will contribute to the support of their professional development and the improvement and development of teacher training programs. Increasing the lifelong learning tendencies of pre-service teachers will make their professional development sustainable and will support training qualified teachers by increasing their teaching motivation. It is believed that determining the variables that affect the lifelong learning tendency and teaching motivation and revealing the correlations between the variables will increase the quality of the pre-service education. There was no study conducted with pre-service teachers examining the variables affecting lifelong learning tendency and teaching motivation and the relation between variables. In this context, it is thought that this study will make an important contribution to the literature.

This study aims to explore the correlation between lifelong learning tendency and teaching motivation among pre-service teachers. Research sub-problems are as follows:

1. Does pre-service teachers' perception of themselves as a successful teacher in the future have a significant effect on their lifelong learning tendency and teaching motivation levels?
2. Does pre-service teacher's wishing to be a teacher after graduation have a significant effect on their lifelong learning tendency and teaching motivation levels?
3. Is there a significant relation between pre-service teachers' lifelong learning tendency and their teaching motivation levels?
4. Does teaching motivation predict lifelong learning tendency among pre-service teachers?

Method

Research Design

In this study, a correlational survey model was used to investigate the relations between pre-service teachers' lifelong learning tendency and their teaching motivation. Correlational survey research aims to determine whether there is a relation between two or more variables in order to make predictions for the future and if there is, to reveal the direction and degree of this relation (Fraenkel, Wallen, & Hyun, 2012). The study also examined whether lifelong learning tendency and teaching motivation differ in terms of perception of being a successful teacher in the future and wishing to be a teacher after graduation.

Study Group

The participants of this research were 462 pre-service teachers studying at the Education Faculty of a state university in Turkey in the spring term of 2020-2021. In order to ensure the normality of the data, 10 data outside the normality distribution were extracted. The research was conducted with data obtained from 452 participants. 74.1% (n=335) of the pre-service teachers participating in the study were female and 25.9% (n=117) were male. 58.4% (n=268) of the pre-service teachers' age range was 17-20 years old, 37.6% (n=170) 21-25 years old, 2.7% (n=12) 26-30 years old, 0.9% (n=4) 31-35 years old and 0.4% (n=2) 36 years and older. 1.3% (n=6) of pre-service teachers thought that they will be a low-achieving teacher in the future, 31% (n=140) thought that they will be a moderately successful teacher, and 67.7% (n=306) thought that they will be a highly successful teacher. 6.2% (n=28) of the

pre-service teachers stated that they did not want to teach after graduation and 93.8% (n=424) stated that they wanted to teach after graduation.

Data Collection Tools

The research data were collected with personal information form and with two different instruments.

Personel information form: In the personal information form developed by the researcher, there were questions about pre-service teachers' gender, department they study, grade level, age range, how successful they perceived themselves as a teacher in the future, and whether they wanted to teach after graduation.

Lifelong learning tendency scale (LLTS): Pre-service teachers' lifelong learning tendency level was determined with LLTS (Diker Coşkun & Demirel, 2010) a four-dimensional, 6-point Likert scale with the extreme points labeled as "strongly disagree" (1) and "strongly agree" (6). The dimensions of the scale were specified as motivation (6 items), perseverance (6 items), lack of regulating learning (6 items), and lack of curiosity (9 items). The Cronbach's alpha reliability coefficient of the total scale in this study was .735. The Cronbach's alpha reliability coefficient of the "motivation" sub-scale was .878, the "perseverance" sub-scale was .879, the "lack of regulating learning" sub-scale was .742 and the "lack of curiosity" sub-scale was .875.

Motivation to teach scale (MTS): The Motivation to Teach Scale (MTS), developed by Kauffman, Yılmaz Soylu and Duke (2011), and adapted into Turkish by Güzel Candan and Evin Gencil (2015), was used to determine pre-service teachers' teaching motivations. This scale was designed to measure pre-service teachers' intrinsic and extrinsic teaching motivations. The scale consisted of 12 items and was arranged in a 6-point likert type. The scale is scored as strongly disagree 1, disagree 2, somewhat disagree 3, somewhat agree 4, agree 5, strongly agree 6. The scale consisted of two dimensions: intrinsic motivation and extrinsic motivation. The lowest score that could be obtained from the entire scale was 12, and the highest score was 72. While Cronbach's Alpha was .90 for the factor of intrinsic motivation, it was .79 for the factor of extrinsic motivation and it was .92 for the total scale. Reliability coefficient in this study was .776 for the factor of intrinsic motivation, whereas it was .715 for the factor of extrinsic motivation, and it was .843 for the total scale. The results of confirmatory factor analysis performed to determine the construct validity demonstrated that the 2-factor and 12-item construct of the scale was preserved as it was. The findings showed that the scale could be used with studies to be conducted in Turkey.

Data Analysis

Before the data collection, pre-service teachers were informed about the purpose of the study. Data were collected in the spring term of 2020-2021. The data was collected online from pre-service teachers due to the Covid 19 pandemic. Data were analyzed using the Statistical Package for Social Sciences (SPSS, version 22), at a significance level of .05.

The data were first subjected to analysis of normality using the skewness-kurtosis coefficients, and 10 data outside the normal distribution were extracted. After that, the analyses were started after the conditions of normality were met. It was observed that LLTS skewness .638, kurtosis 1.844; MTS skewness -.412, kurtosis .032. When kurtosis and skewness values are between -2.0 and +2.0, the data is considered to be normally distributed (George and Mallery, 2016). For this reason, parametric tests were used in the analysis of the data. Mean and standard deviation of research variables were computed to obtain descriptive statistics. An independent samples t-test was used to compare two independent means, one-way analysis of variance was used to compare more than two means and pearson correlation test was used to investigate the relationship between variables. Multiple regression analysis was done so as to reveal the degree of correlations found between the variables in the model. While the independent variables of the research were perceiving oneself as a successful teacher in the future and wanting to be a teacher after graduation; the dependent variables were lifelong learning tendency and teaching motivation.

Ethical Principles

Ethical committee approval for the study was obtained from the Social and Humanities Sciences Research Ethics Committee of Kirsehir Ahi Evran University (Approval Number: 2021/2/6).

Results

Perceiving Yourself as a Successful Teacher

The descriptive statistics within the sub-dimensions of LLTS, $\bar{x} = 5.01$ for pre-service teachers' motivation sub-dimension, $\bar{x} = 4.52$ for perseverance sub-dimension, $\bar{x} = 1.81$ for lack of regulating learning sub-dimension, and $\bar{x} = 2.07$ for lack of curiosity sub-dimension. Furthermore, it is seen that within the sub-dimensions of MTS, $\bar{x} = 4.20$ for intrinsic motivation sub-dimension, and $\bar{x} = 3.65$ for extrinsic motivation sub-dimension. The level of lifelong learning tendency and teaching motivation of pre-service teachers were examined according to their perception of themselves as a successful teacher in the future. The results are given in Table 1.

Table 1. Comparison of pre-service teachers' scores based on LLTS and MTS by their perception of themselves as a successful teacher in the future

Scales and Sub-dimensions	Perception of themselves as a successful teacher in the future	N	\bar{x}	SD	F	p	Post-Hoc
LLTS-motivation	1. Low	6	4.58	1.78	44.861	.000*	3>2
	2. Moderate	140	4.55	.82			
	3. High	306	5.22	.61			
LLTS-perseverance	1. Low	6	4.19	1.48	30.043	.000*	3>2
	2. Moderate	140	4.06	.91			
	3. High	306	4.74	.81			
LLTS-lack of regulating learning	1. Low	6	2.11	.98	15.479	.000*	2>3
	2. Moderate	140	2.07	.74			
	3. High	306	1.68	.68			
LLTS-lack of curiosity	1. Low	6	2.74	1.20	18.133	.000*	2>3
	2. Moderate	140	2.37	.88			
	3. High	306	1.92	.71			
MTS- intrinsic motivation	1. Low	6	1.93	1.05	29.101	.000*	2>1
	2. Moderate	140	3.91	1.08			
	3. High	306	4.37	.88			
MTS- Extrinsic motivation	1. Low	6	1.90	.88	10.996	.000*	2>1
	2. Moderate	140	3.50	1.13			
	3. High	306	3.76	1.03			

LLTS: Lifelong learning tendency scale; MTS: Motivation to Teach Scale

* $p < 0.05$

As it is clearly seen in Table 1, the pre-service teachers' perceptions of being a successful teacher in the future affect LLTS and MTS sub-dimensions in a statistically significant way. When homogeneity of variances cannot be achieved in one-way ANOVA, Tamhane's T2 is the most widely used post-hoc test to see the changes in the dependent variable according to the groups within the factor (Antalyalı, 2010). Therefore, Tamhane's T2 was used as a post-hoc test. According to the results of Tamhane's T2 test, it was concluded that the motivation and perseverance levels of pre-service teachers who have a high perception of being a successful teacher in the future are higher than those who have moderate perception. Pre-service teachers who have a moderate perception of being a successful teacher in the future have a higher lack of regulating learning and lack of curiosity than those with a high perception. It can be said that as the perception of pre-service teachers to be a successful teacher in the future increases, their intrinsic and extrinsic motivations increase.

Wishing to Become a Teacher after Graduation

The level of lifelong learning tendency and teaching motivation of pre-service teachers were examined according to their wishing to be a teacher after graduation. The results are given in Table 2.

Table 2. Comparison of pre-service teachers' scores based on LLTS and MTS by wishing to be a teacher after graduation

Scales and Sub-dimensions	Wishing to be a teacher after graduation	N	\bar{X}	Sd	t	p
LLTS-Motivation	Yes	424	4.99	450	-.975	.330
	No	28	5.14			
LLTS-perseverance	Yes	424	4.51	450	-.486	.627
	No	28	4.60			
LLTS-lack of regulating learning	Yes	424	1.80	450	-.683	.495
	No	28	1.90			
LLTS-lack of curiosity	Yes	424	2.07	450	-.097	.922
	No	28	2.09			
MTS- intrinsic motivation	Yes	424	4.31	450	9.891	.000*
	No	28	2.55			
MTS- Extrinsic motivation	Yes	424	3.73	450	5.911	.000*
	No	28	2.52			

LLTS: Lifelong learning tendency scale; MTS: Motivation to Teach Scale
 * p<0.05

As seen in Table 2, the motivation, perseverance, lack of regulating learning and lack of curiosity sub-dimensions of pre-service teachers' lifelong learning tendencies are not affected in a statistically significant way by their willingness to teach after graduation ($p>.05$). Intrinsic and extrinsic motivations of pre-service teachers are affected in a statistically significant way by their desire to teach after graduation. The intrinsic and extrinsic motivations of those who want to teach after graduation are higher than others. Pre-service teachers' thoughts on starting teaching after school increases their teaching motivation.

The Relationship between Lifelong Learning Tendencies and Teaching Motivation Levels

Pearson correlation coefficients among the pre-service teachers' lifelong learning tendency and their teaching motivation levels are presented in Table 3.

Table 3. The relationship between lifelong learning tendency and their teaching motivation levels of pre-service teachers

Variables	1	2	3	4	5	6
1. Motivation	1					
2. Perseverance	.790**	1				
3. Lack of regulating learning	-.301**	-.284**	1			
4. Lack of curiosity	-.537**	-.592**	.599*	1		
5. Intrinsic motivation	.272**	.308**	-.156**	-.199**	1	
6. Extrinsic motivation	.077	.095*	.068	.071	.640**	1

**p<0.01
 * p<0.05

The results in Table 3 show a positive low-level relation between the motivation and intrinsic motivation ($r =.272, p< .01$), perseverance and intrinsic motivation ($r =.308, p< .01$), perseverance and extrinsic motivation ($r =.095, p< .05$). On the other hand, there was a negative low-level relation between lack of regulating learning and intrinsic motivation ($r =-.156, p<.01$), lack of curiosity and intrinsic motivation ($r=-.199, p<.01$). In order to determine the predictors of the lifelong learning tendency, multiple regression analysis was conducted. The results of the analysis are presented in Table 4.

Table 4. The prediction of the lifelong learning tendency by the teaching motivation

Variables	B	Standard error	β	t	p	Partial r	Durbin-Watson
Constant	3.03	.07	-	42.07	.000	-	
Intrinsic motivation	-.02	.02	-.05	-.74	.46	-.04	
Extrinsic motivation	.07	.02	.21	3.38	.001	.16	1.98
R=.179 R ² =.032 F=7.441 p=.001							
Dependent variable: lifelong learning tendency							

Table 4 suggests that intrinsic and extrinsic motivation variables are a significant predictor of lifelong learning tendency ($R=.179$, $R^2=.032$; $p<.01$). Cohen (1988) interpreted the effect sizes for the regression coefficient (R^2) as: low .02, moderate .13, and strong .26. According to the standardized regression coefficient (β), the relative importance of the predictor variables on the lifelong learning tendency scores; extrinsic and intrinsic motivation. The t-test results regarding the significance of the regression coefficients shows that extrinsic motivation is a significant predictor of lifelong learning tendency scores. The F value of 7,441 in the table indicates that the model as a whole is significant at all levels ($p<.01$). The results of multiple regression analysis revealed that the teaching motivation of pre-service teachers has a positive low effect on their lifelong learning tendency ($F=7.441$, $p<0.01$).

Discussion and Conclusion

In this study, which aims to determine the relationship between pre-service teachers' lifelong learning tendencies and teaching motivation, it has been concluded that pre-service teachers who have a high perception of being a successful teacher in the future have higher motivation and perseverance levels than those who have moderate perception. In other words, as the pre-service teachers believe that they will be a successful teacher in the future, their motivation and persistence, which are sub-dimensions of lifelong learning tendency, increase. In addition, pre-service teachers who have a moderate perception of being a successful teacher in the future have higher levels of lack of regulating learning and lack of curiosity than those with a high perception. When pre-service teachers believe that they will be successful teachers in the future, their self-regulation and curiosity levels, in other words, their lifelong learning tendencies increase. Diker Coşkun (2009) states in her study with university students that as the lifelong learning tendencies of the students increase, their beliefs about future work success also increase. There are similar research results in the literature regarding the perception of success and lifelong learning tendency (Demirel & Akkoyunlu, 2017). The results of the research conducted with the teachers also overlap with the results of the current research. It is known that as the professional self-efficacy perceptions of teachers increase, their lifelong learning tendencies also increase (Ayra, & Kösterelioğlu, 2015). The result obtained in this study; the perceptions of pre-service teachers that they will be successful teachers in the future increase their lifelong learning tendencies, can be explained by Possible Selves Theory. According to the Possible Selves Theory developed by Markus and Nurius (1986), possible selves are how individuals imagine themselves in the future (Hoyle & Sherrill, 2006). It provides clues for future behavior by allowing individuals to evaluate and interpret the current appearance of the self (Dunkel & Anthis, 2001). In terms of professional identity development, it is possible to say that Possible Selves Theory offers a theoretical framework suitable for examining the professional identity development of pre-service teachers in terms of focusing on future selves (Hamman, et al., 2010). When individuals think about their possible selves, for example, they hope to be a successful teacher in the future, this possible self about the future becomes a source of motivation for them to achieve their goal and avoid undesirable consequences (Nuttin, 1984). In this context, it is thought that the higher motivation, persistence, curiosity and self-regulation levels of pre-service teachers who hope to be successful teachers in the future may also be related to their possible self perceptions.

It is concluded that as the pre-service teachers' perception of being a successful teacher in the future increases, their intrinsic and extrinsic motivations, which are sub-dimensions of teaching motivation, increase. There are different studies in the literature that support the research result. It is known that pre-service teachers' possible teacher selves play an important role on their intrinsic and extrinsic teaching motivations (Gün, & Turabik, 2019). One of the most important jobs of teachers is teaching. Considering the definition and characteristics of motivation, it is thought that teaching motivation is very valuable for teachers and pre-service teachers. Studies have shown that teachers' desire to be successful affects their motivation (Börü, 2018). Also according to Maslow's theory of hierarchy of needs, the desire to be successful is an important factor that motivates people to work (Riggio, 2017). Teachers' ability to motivate their students in the teaching and learning process also depends on their own motivation (Bernaus et al., 2009; Dörnyei & Ushioda, 2011). In this context, the increase in teachers' motivation to teach increases the success of students (Neves de Jesus & Lens, 2005; Suryanti Tambunan et al., 2016). Teaching motivation is known to be associated with personal accomplishment and positive teaching behavior (Roth et al., 2007). In addition, it is known that pressure

factors such as teachers' having to comply with a curriculum, colleagues and performance standards reduce their motivation to teach (Pelletier et al., 2002). It is believed that revealing these variables that affect the motivation of pre-service teachers and teachers will make important contributions to the development process of teacher training programs. Because teaching motivation is an important factor that predicts the quality of teaching (Watt & Richardson, 2008).

Another result of this study is that the intrinsic and extrinsic motivations of pre-service teachers are significantly affected by their desire to teach after graduation. The intrinsic and extrinsic motivations of those who want to teach after graduation are higher than the others. In other words, pre-service teachers' thoughts of starting teaching after school increases their teaching motivation. The teaching motivation researches in the literature suggest that pre-service teachers who want to be a teacher after graduation have higher levels of teaching self-efficacy belief, motivation (intrinsic and extrinsic motivation) and professional attitude than those who do not (Gök et al., 2019). A study conducted with classroom teachers showed that teachers' love for the teaching profession increases their intrinsic motivation (Ada et al., 2013). In this study, it can be thought that the pre-service teachers' desire to teach after graduation stems from their positive perceptions about the profession. Because, among the important motivation sources that affect the motivation of teachers are their love for their profession and their feeling of competence (Börü, 2018). There are many studies examining the relation between pre-service teachers' motivation to teach and their attitudes towards the teaching profession (Ayık et al., 2015; Başaran & Dedeoğlu Orhun, 2013; Bozpolat, 2016; Gök, & Atalay Kabasakal, 2019). Aksoy (2010) found that the attitudes of pre-service teachers who want to be a teacher after graduation are higher than those who do not.

In this study, a positive low level significant correlation was found between pre-service teachers' lifelong learning tendency and teaching motivation. Teaching motivation of pre-service teachers has a positive low effect on their lifelong learning tendency. It is thought that teacher training programs affect the knowledge, skills, motivation and attitudes of future teachers (Blömeke et al., 2011; König, Rothland, Tachtsoglou, & Klemenz, 2016; Tatto et al., 2012). It is important for pre-service teachers to have experiences that will positively affect their lifelong learning tendencies and teaching motivations during pre-service education. The development of teachers and their teaching skills is based on professional development supported by lifelong learning. Professional development cannot take place without learning, and pedagogical and knowledge-based understanding (Nicholls, 2000). It is known that in addition to knowledge-based education in teacher training programs, practical opportunities encourage lifelong learning of teacher candidates (Matsumoto-Royo et al., 2021). There was a positive significant correlation between lifelong learning and personal-professional competence (Eksi, et al., 2020). There was a positive and statistically significant correlation between pre-service teachers' lifelong learning and attitudes towards the teaching profession (Kula, 2023). The education system expects teacher training institutions to train teachers with high motivation. Research in the field of teacher training should focus on experiences that shape, develop and maintain teachers' attitudes and motivations in the teacher education process (Tang, et al., 2014). Different domains such as family, government, society, economy and work can positively or negatively affect an individual's lifelong learning journey. If the desire is to create a successful lifelong learning culture for pre-service teachers, the role of positive environments and supportive relationships should not be ignored (Ng, 2010).

Recommendations

The results of this study provide important data to train qualified teachers, who will play an important role in shaping future generations. Teachers should gain a positive attitude towards the profession as highly motivated, lifelong learners during the education given to pre-service teachers in education faculties. The fact that individuals work with love, desire, curiosity and excitement also affects their performance and success in that job. "What are the practices that will make pre-service teachers eager to work in the teaching profession?" is a question that teacher training institutions and education policy makers should consider. This study revealed that pre-service teachers' perceptions of being a successful teacher and teaching after graduation affect their lifelong learning tendencies and motivation to teach. Pre-service teachers living in different regions with different teacher training practices and cultures have different teaching attitudes and motivations (Tang, Wong, Wong, & Cheng, 2018). Therefore, there is a need to determine the characteristics of teacher education that will attract

pre-service teachers in Turkey, which is a bridge between east and west and a country with intense interaction between different cultures. It was also seen that future research was needed to determine the reasons for the relationship between lifelong learning tendencies and teaching motivations.

Pre-service teachers with high lifelong learning tendency will become teachers who are highly motivated, do not give up quickly in the face of difficulties, have developed self-regulation skills and have constant curiosity for learning. Studies show that measures should be taken to cultivate pre-service teachers who are lifelong learners with high motivation to teach during teacher training programs. There is a need for experimental studies to clarify the external factors that predict the lifelong learning tendencies of pre-service teachers. It is recommended to determine situational and dispositional barriers, and also institutional barriers (Merriam et al., 2007), which affect pre-service teachers. It is necessary for teachers to have high teaching motivation and thus lifelong learning tendencies, to keep up with the times, to improve themselves, and to update their knowledge.

Limitations

This study has a number of limitations. Quantitative methodology was used in the research. A research design including qualitative methods would be helpful to determine the educational activities that will increase the lifelong learning tendencies and teaching motivation of pre-service teachers and to obtain in-depth information. In this study, pre-service teachers' perceptions of being a successful teacher in the future and their willingness to teach after graduation were identified to be independent variables. Different independent variables that may affect lifelong learning tendency and teaching motivation can be tested. Thus, new ways of training highly motivated teachers with lifelong learning, who are willing to update their knowledge, skills and awareness may be identified. This and similar studies will provide important contributions to the field of teacher training.

This research was conducted with pre-service teachers studying at a university in the Central Anatolian region of Turkey. The number of the pre-service teachers participating in the study was low. Variables can be tested in future studies with participants from different regions, with different characteristics, and with a higher number of participants.

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